# State of California: Meeting the Energy Challenge

Governor Gray Davis

April 5, 2001

#### **Overview**

The Governor is working to resolve California's energy crisis and to protect California residents from volatile energy prices. This integrated program includes: (i) increasing supply of power; (ii) an expanded conservation/demand reduction program focused on this summer; and (iii) stabilizing the electricity industry by restoring California's investor-owned utilities to solvency. The Governor's actions are designed to accomplish all of these goals while minimizing the impact on taxpayers and ratepayers. Failure to reach agreement with the utilities and the dismissal of lawsuits could result in consumer rate increases of up to 150%.

#### **Increasing Supply**

- To ensure reasonable power prices in the future, the State of California has the goal of increasing the supply of generation to exceed demand by 15%
- No major plants have been built in California for the 12 years prior to the Davis administration
- Goal of increasing generation capacity by 20,000 MW over the next three to four years. 12 major power plants have been licensed since April 1999; 4 will come on-line this summer; 3 will come on-line next summer; and an additional 10 new major power plants are in the application review process
- California is moving to establish a public power authority to build more power plants. If the private sector fails to build all the plants that California needs, the State will build them

#### Conservation

- Series of integrated programs that work together to reduce demand by at least 10% this summer
- Residential programs include the 20/20 rebate program that provides a 20% rebate for those who conserve, energy efficiency programs and a mass media appeal to all Californians for specific efforts to further reduce their electricity usage
- Commercial programs include voluntary demand buyback programs, the 20/20 rebate program that provides a 20% rebate for businesses that conserve during peak hours, and interruptible programs

#### **Overview (Continued)**

#### **Stabilizing the Electricity Industry**

- The State of California is currently purchasing power for consumers that the utilities cannot generate; under this proposal, the utilities would resume purchasing power for consumers after 2002
- Pacific Gas & Electric ("PG&E"), Southern California Edison ("SCE") and San Diego Gas & Electric ("SDG&E") will be allowed to use some proceeds of the rate increase (after enactment of the dedicated rate component) to repay their creditors, subject to the following conditions. The utilities must:
  - Provide internally generated power (predominately hydro and nuclear) to consumers through 2010 at costbased rates
  - Dismiss all lawsuits seeking to pass on inflated power costs to consumers
  - Sell transmission assets to the State of California at fair value
  - Provide conservation easements on an estimated 100,000 acres of land

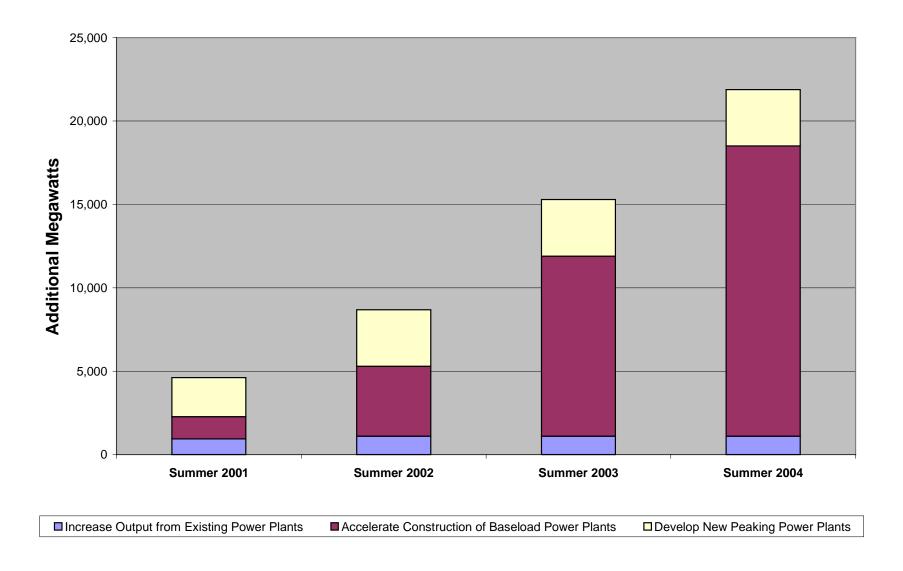
# **Key Program Elements**

Program	Effect		
<b>New Generation Construction</b>	• 12 new major plants licensed since April 1999		
	• 4 new power plants on-line this summer		
	• 3 new power plants on-line next summer		
	• 10 new major power plants in application review process		
	<ul> <li>Has reduced power plant construction approval time by at least half</li> </ul>		
California Department of Water	Creates a creditworthy buyer to prevent blackouts		
Resources ("DWR") Purchases New Power Through December 2002	• Limits exposure to expensive spot power market through long-term contracts		
	<ul> <li>Has already contracted to purchase 600 million MWh of power through 2010 at an average price of 6.9¢ / kWh</li> </ul>		
<b>Demand Reduction Programs</b>	<ul> <li>Programs designed to reduce electricity usage by approximately 10%</li> </ul>		
	• Leverages integrated set of programs:		
	<ul> <li>20/20 for residential and commercial / industrial</li> </ul>		
	<ul> <li>Demand buyback and interruptibles</li> </ul>		
	- Energy efficiency		
	- Public education and outreach		
<b>State Acquisition of Transmission Assets</b>	Provides path for utilities to financial stability		
	Will upgrade transmission system		
	<ul> <li>A part of contract negotiations with all three utilities</li> </ul>		

# **Key Program Elements**

Program	Effect
New Rate Structure	<ul> <li>Designed to accomplish multiple goals:         <ul> <li>Pay for future power purchases</li> <li>Make utilities solvent subject to receipt of transmission lines, long-term low-cost power, conservation easements and dismissal of lawsuits</li> <li>Protect consumers from extreme market prices</li> </ul> </li> <li>Tiered rate structure to reward and encourage conservation</li> </ul>
Sell Revenue Bonds	Protects California economy from shock of extreme market prices and failed deregulation
	<ul> <li>Protects consumers from dysfunctional market conditions until supply increases</li> </ul>
	<ul> <li>Allows the higher cost of power to be spread over time</li> </ul>
	<ul> <li>Provides funding to buy power</li> </ul>
	<ul> <li>Repays the State's General Fund (with interest) and protects California's strong credit rating</li> </ul>
<b>Establish Power Authority</b>	<ul> <li>Provides mechanisms to build new power plants if the private sector does not</li> </ul>
	• Ensures that supply will exceed demand by at least 15%
	<ul> <li>Consolidates governmental energy functions</li> </ul>

### **Cumulative Generation Additions - 2001 to 2004**



Note: Generation capacities are derated for summer conditions.

## **Generation Projects and Capacity - 2001 to 2004**

	20	001	20	002	20	003	20	004	Cumi	ulative
	MW	Projects	MW	Projects	MW	Projects	MW	Projects	MW	Projects
Existing Power Plants										
Rerate Energy										
Commission Projects	280	6	10	2					290	8
Rerate Other (not Energy										
Comm.) Projects	89	14							89	14
Restart of Existing Projects	450	1	148	1					598	2
Restart Renewable										
Projects (Biomass)	123	7							123	7
Baseload Power Plants										
Approved Energy										
Commission Projects 2/	1,331	4	2,868	3	5,458	10	6,605	11	16,261	28
New Peaking Plants										
ISO Peaking Projects	1,041	25							1,041	25
New Renewable Energy										
Projects	85	22	257	23	50	1			392	46
New Emergency Peaking										
Projects	761	13	779	7					1,540	20
Energy Commission										
Peaking Pending	45	1							45	1
LADWP Harbor	264	5							264	5
Other Summer Projects	149	14								
TOTAL	4,618	112	4,062	36	5,508	11	6,605	11	20,643	156

<sup>1/</sup> Generation capacities are derated for summer conditions to the extent they are known.

<sup>2/</sup> Numbers for 2003 and 2004 also include projects in review or prefiling by the Energy Commission.

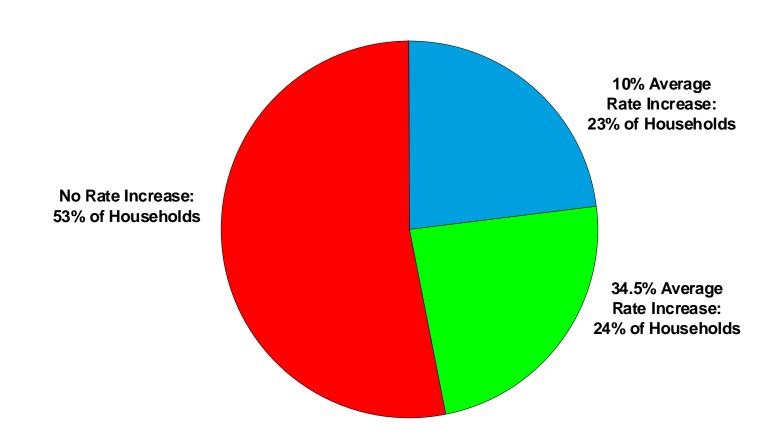
## **Baseload Plant Siting Status**

Project	Process	Capacity MW Nameplate	Capacity MW Derated 1/	Location	Da	tes
Projects Approved					Decision	On-line*
Sutter	Construction	500	480	Sutter Co.	4/99	7/01
Los Medanos	Construction	559	537	Contra Costa	8/99	7/01
La Paloma	Construction	1.048	1.006	Kern Co.	10/99	12/01-3/02
Delta	Construction	880	845	Contra Costa	2/00	4/02
Moss Landing	Construction	1.060	1.018	Monterey Co.	10/00	6/02
High Desert	Financing	720	691	San Bernardino	5/00	7/03
Sunrise	Construction	320	307	Kern Co.	12/00	8/01
Elk Hills	Financing	500	480	Kern Co.	12/00	3/03
Pastoria	Financing	750	720	Kern Co.	12/00	1/03
United Golden Gate	Financing	51	49	San Mateo Co.	2/01	8/01
Midway-Sunset	Financing	500	480	Kern Co.	3/01	3/03
Mountainview	Financing	1,056	1,014	San Bernardino	3/01	12/02
Blythe	Financing	520	499	Riverside Co.	3/01	3/03
Total		8,464	8,125			
Projects in Review					Decision	On-line*
Huntington Beach	2-mo. AFC	450	432	Orange Co.	4/01	7/01
Hanford	6-mo. SPPE	99	95	Kings Co.	4/01	4/03
Metcalf	12-mo. AFC	600	576	Santa Clara Co.	7/01	7/03
Three Mountain	12-mo. AFC	500	480	Shasta Co.	5/01	5/03
Otay Mesa	12-mo. AFC	510	490	San Diego Co.	4/01	4/03
Contra Costa	12-mo. AFC	530	509	Contra Costa	7/01	7/03
Neuva Azalea	12-mo. AFC	550	528	Los Angeles Co.	suspended	suspended
Potrero	12-mo. AFC	540	518	San Francisco	11/01	11/03
Morro Bay	12-mo. AFC	1,200	1,152	San Luis Obispo	1/02	1/04
El Segundo Repower	12-mo. AFC	630	605	Los Angeles Co.	2/02	2/04
Rio Linda/Elverta	12-mo. AFC	560	538	Sacramento Co.	5/02	5/04
Pastoria II	6-mo. AFC	250	240	Kern Co.	10/01	4/04
Golden Gate	6-mo AFC	570	547	San Mateo Co.	11/01	11/03
East Altamont	12-mo. AFC	1,100	1,056	Alameda Co.	5/02	5/04
Total		6,989	6,709			
Projects in Preapplic	ation Review a	and Publicly A	nnounced		Filing	On-line*
Kern Co. Restart	2-mo. AFC	160	154	Kern Co.	4/01	10/01
Woodland II	SPPE	80	77	Stanislaus Co	4/01	10/03
Colusa Comb. Cycle	12-mo. AFC	600	576	Colusa County	5/01	7/04
Roseville	12-mo. AFC	750	720	Placer Co.	8/01	8/04
Russell City	12-mo. AFC	600	576	Hayward	6/01	6/04
Antelope Valley	12-mo. AFC	1,000	960	Kern Co.	8/01	10/04
Salton Sea Geo.	6-mo. AFC	300	288	Imperial Co.	6/01	12/03
Carson Expansion	6-mo. AFC	130	125	Los Angeles Co.	6/01	12/03
Magnolia	6-mo. AFC	310	298	Los Angeles Co.	5/01	11/03
SMUD Comb. Cycle	12-mo. AFC	1,000	960	Sacramento Co.	8/01	10/04
South City	12-mo. AFC	550	528	San Mateo Co.	10/01	11/04
Long Beach	12-mo. AFC	500	480	Los Angeles Co.	2/02	3/05
Redondo Beach	12-mo. AFC	1,000	960	Los Angeles Co.	3/02	4/05
Total		6,980	6,701	ŭ		
* Estimated on-line dat	e if annroyed a	,				

<sup>\*</sup> Estimated on-line date if approved and constructed

<sup>1/</sup> Derated by 4% for summer operation.

## **Distribution of Rate Increases by Household**



#### **Residential Average Rate Increase**

	Average Rate Increase (¢ / kWh) on Total Residential Bill	Average Percent Increase to Total Bill for Residential Consumers >130% of Baseline <sup>(1)</sup>
PG&E	2.44¢	28%
SCE	2.21	25
SDG&E	2.57	27
Weighted Average		26.5%

- Approximately 50% 55% of residential customers (i.e., those <130% of baseline) will not experience any rate increase
- The next 23% of residential customers will experience about a 10% average rate increase
- The weighted average increase for all residential customers across all utilities will be 26.5%
- The weighted average increase for all residential customers above 200% of baseline across all three utilities will be 34.5%
- Those who conserve by 20% during the summer months can achieve a 20% rebate in their overall electricity bill

(1) Baseline is an allocation of electricity billed at a lower rate for residential customers. The baseline amount is determined by the California Public Utility Commission ("CPUC") based on the number of days in the billing period, season of the year, climatic region, and customer's primary heating source. Residential customers receive this allocation automatically.

#### **Commercial / Industrial Average Rate Increase**

Average Rate Increase (¢ / kWh) on Total Commercial / Industrial Bill

**Average Percent Increase to Total Bill for Commercial / Industrial Consumers** 

	Flat Rate	Time of Use	Flat Rate	Time of Use
PG&E	3.03¢	2.01¢	29%	30%
SCE	2.55	2.03	23	24
SDG&E	2.86	2.86	22	29

- Rate structure will provide incentives for businesses to shift electricity use from peak to off-peak hours
- Special rates for agriculture businesses (5% increase for non-time-of-use, 15% increase for time-of-use)
- All businesses are eligible for cash incentives and savings from demand reduction programs (20/20 program, demand buydown programs, and interruptibles)

# <u>PG&E – Rate Increase Effect on Typical Residential Monthly Bill<sup>(1)</sup></u>

- No increase on the 55% of customers below 130% of baseline
- 28% average increase on total bill for customers above 130% of baseline

	Households (%)	Consumption (%)	Current Monthly Bill (\$)
Low-Medium Users (<130% of Baseline)	55%	29%	\$32
Medium Users (130% – 200% of Baseline)	23	25	70
Heavy Users (>200% of Baseline)	22	46	138

Effect on	Effect on Typical Residential Bill				
O	Average Increase in Monthly Bill				
(%)	(\$)	Change (\$)			
0%	\$0	\$32			
11	7	77			
37	51	189			

<sup>(1)</sup> Based on data provided by CPUC and PG&E.

# <u>SCE – Rate Increase Effect on Typical Residential Monthly Bill<sup>(1)</sup></u>

- No increase on the 52% of customers below 130% of baseline
- 25% average increase on total bill for customers above 130% of baseline

	Households (%)	Consumption (%)	Current Monthly Bill (\$)
Low-Medium Users (<130% of Baseline)	52%	27%	\$30
Medium Users (130% – 200% of Baseline)	23	24	63
Heavy Users (>200% of Baseline)	25	49	129

Effect on	Effect on Typical Residential Bill				
_	Average Increase in Monthly Bill				
(%)	(\$)	Change (\$)			
0%	\$0	\$30			
9	6	69			
32	42	171			

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<sup>(1)</sup> Based on data provided by CPUC and SCE.

# <u>SDG&E – Rate Increase</u> Effect on Typical Residential Monthly Bill<sup>(1)</sup>

- No increase on the 49% of customers below 130% of baseline
- 27% average increase on total bill for customers above 130% of baseline

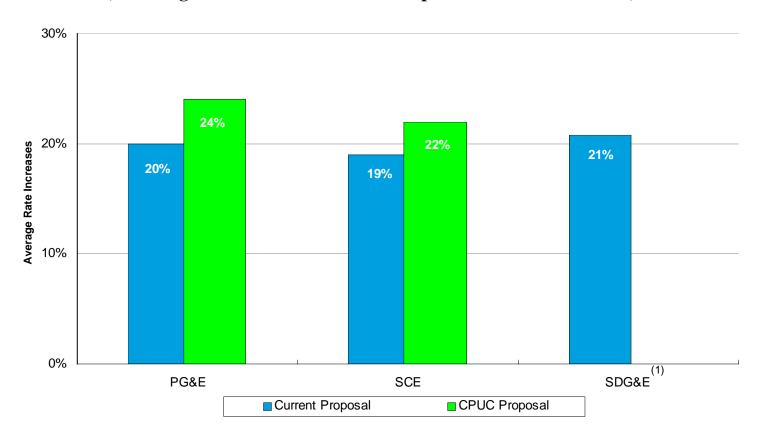
	Households (%)	Consumption (%)	Current Monthly Bill (\$)
Low-Medium Users (<130% of Baseline)	49%	24%	\$26
Medium Users (130% – 200% of Baseline)	23	21	54
Heavy Users (>200% of Baseline)	28	55	113

Effect on	<b>Effect on Typical Residential Bill</b>				
_	Average Increase in Monthly Bill				
(%)	(\$)	Change (\$)			
0%	\$0	\$26			
9	5	59			
33	37	150			

<sup>(1)</sup> Based on data provided by CPUC and SD&E.

## Average Rate Increase: Current Proposal vs. CPUC Proposal

Average Rate Increase on Total Bill for all Residential Customers (Including the 50% - 55% Who Will Experience No Rate Increase)



<sup>(1)</sup> CPUC has not yet considered a rate increase for SDG&E.

### **Demand Reduction / Energy Conservation Programs**

**Target:** 10% reduction in electricity usage statewide.

Residential

• 20/20 Summer Rebate

Appliance Rebate

• Home Weatherization Assistance

Renewable Energy Tax Credit

• Public Outreach / Education

**Commercial / Industrial** 

• 20/20 Summer Rebate

Energy Demand Buyback

• Interruptible Service Program

• Time-of-Use Metering

Distributed Generation

Energy Efficiency Program

**Government / Schools** 

Mandatory Reduction / Load Shifting

Distributed Generation

Local Partnership Program

• Local Assistance grants